

Obituaries

Henning Ruben

Anaesthetist who invented the Ruben valve and the Ambu self-inflating bag

By any standards, Henning Ruben was a remarkable man. During his career he was, at various times, a member of the Danish fencing team, a professional dancer, magician, thought reader, dentist, doctor, and inventor. To these might be added his reputation as a *bon viveur* and *raconteur* par excellence. It was, however, for his skill and originality as an inventor that he was best known.

He was born in Copenhagen in 1914, the eldest son of an orthodox Jewish family. At 19 he entered the Royal Dental College in Copenhagen, combining his studies with the exercise of his other talents. With a well known singer, he toured the halls as a professional dancer, excelling at the tango. He was also an accomplished athlete, becoming a member of the Danish fencing team that won a bronze medal at the world championships in Monte Carlo in 1939. He became a member of the Danish Magic Circle.

In 1943 he enrolled as a medical student at the University of Copenhagen. But after the Nazi occupation of Denmark, he had to leave the country urgently. One night he escaped on a fishing boat bound for Sweden, where he remained for two years, working as a dentist in Stockholm, as well as employing his talents as a magician and thought reader. He returned to Denmark in 1945 and graduated in medicine in 1946.

At that time, anaesthesia was an undeveloped specialty in Denmark but was more advanced in Sweden, where Ruben found the combination of physiology, pharmacology, and physics of great interest. He decided to become an anaesthetist, but in the early years after the war, travel was difficult. However, in 1947 he was invited to Sweden by the Swedish Society of Illusionists and, at their meeting in Stockholm, he performed brilliantly to a packed concert hall. During that visit, he introduced himself to the anaesthetists at Sabbatsberg Hospital and St Ericks Hospital. As a result, the following year he was appointed to the Serafimerlasarettet Hospital in Stockholm. He returned to Copenhagen in 1949 and was appointed to the Gentofte Hospital and, later, to the Finsen Institute.



Eager to broaden his experience, in 1951 he negotiated a six month secondment to the University of Iowa to work with the anaesthesiologist Lucien Morris. It was in Iowa that he met the anaesthesiologist James Elam with whom he began a collaboration that lasted until both had retired.


Back in Copenhagen, he was appointed head of department at the Finsen Institute in 1953. There he began his programme of research and invention that was to have a lasting effect on the practice of anaesthesia and resuscitation. In 1953 he developed a lightweight, foot-operated sucker. This played a significant part in other developments for, in addition to its intrinsic value, it brought Ruben into contact with Dr Holger Hesse, the founder of the company Ambu-Testa. The foot-operated sucker, although first marketed by Ambu, was soon copied by other manufacturers. But this was only the start.

The following year Ruben described and published a simple automatic constant-rate syringe pump for the controlled delivery of drugs. It was driven by a wind-up alarm clock. However, as early as 1948, he had seen a non-rebreathing valve in an American anaesthetic journal. Unable to acquire it quickly, he attempted to make a copy, but misinterpreted the drawing.

Entirely by chance, he introduced some changes that led, with the help of a watchmaker, to the development of his own non-rebreathing valve—the “Ruben valve”—which made him a household name among anaesthetists round the world. By 1982, over a million Ruben valves had been made.

Curiously, it was a strike by Danish truck drivers in 1954 that led to the development of the self-inflating bag. Lorries delivering oxygen were kept off the road and oxygen supplies in Danish hospitals ran low. Ruben got a mechanic to weld together four bicycle wheel spokes and then manipulated the spokes into an anaesthesia bag. He described how, with the aid of an attached string, he obtained a globe-shaped frame, which kept the bag expanded. When compression of the bag was released, the spokes regained their curved shape, making the bag self-filling. With his non-rebreathing valve and a valved inlet, the self-inflating bag was born and copied all over the world. In 1964 the American Medical Association declared the self-inflating bag to be among the most significant medical advances in anaesthesia of the previous 25 years.

In 1957 training in resuscitation (mouth to mouth) became mandatory in many schools in Scandinavia. In the same year Ruben constructed the first manikin on which people could be trained in the correct use of the self-inflating bag. Six months later, when mouth to mouth ventilation had become widely accepted, the manikin was in great demand for training. In addition to many medical meetings, it was demonstrated at an international NATO meeting in Copenhagen.

Ruben leaves a wife, Vera; four children; and seven grandchildren. [JOHN ZORAB] 

*Henning Ruben, professor of anaesthesia
University of Copenhagen 1955-84 (b 1914;
q Copenhagen 1946), d 4 December 2004.*

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Samuel Isaac Cohen

One of the pioneers of liaison psychiatry



Samuel Cohen was professor of psychiatry at the Royal London Hospital from 1984 to 1990, and on the clinical staff of the hospital from 1961. He was at the forefront of developments in what became known as liaison psychiatry. His greatest administrative achievement was to persuade 10 surgeons and physicians at the London to surrender two beds each, and to open Rachel ward as a psychiatric ward within the general teaching hospital.

As a clinician he was successful at helping people with complex psychosomatic problems, which had baffled a succession of other specialists. He was sharp in the

recognition of problems arising from misuse of alcohol, tranquillisers, or cannabis, and particularly insightful regarding symptoms arising from the abrupt discontinuation of prescribed drugs or alcohol.

After house jobs in Cardiff, Sam trained in medicine at the Hammersmith and at the Brompton Chest hospitals in London, returning to Cardiff as a lecturer on the medical unit. He had contracted tuberculosis as a medical student and his career was interrupted in 1950 by a flare-up of pulmonary tuberculosis, for which he underwent therapeutic pneumothorax.

He entered psychiatry in 1956, training at the Maudsley Hospital and obtaining the diploma in psychological medicine in 1958. He developed a particular interest in psychosomatic disorders and was one of the first psychiatrists on the staff of the London Hospital.

In 1968 he was invited to Israel and devoted a year to moving and re-establishing the Ezrath Nashim hospital in Jerusalem as a modern psychiatric centre. He was opposed to policies of "seclusion" of disturbed patients

and was proud to take away restraints that had been used on patients.

Sam was chairman of the medical council of the Royal London Hospital, where he facilitated the start of the helicopter emergency service, and supported the obstetrician and gynaecologist Professor Wendy Savage through a time when community obstetrics faced daunting accusations.

After retirement Sam continued clinical work as a visiting professor in Australia and New Zealand until 1998. He was a scholarly individual and he continued to study, publishing papers concerning the Book of Psalms and their structure.

He had chronic lymphatic leukaemia and, while receiving chemotherapy, had a series of infections, including a recurrence of the tuberculosis from his youth.

He leaves a wife, Vivienne; two children; and 12 grandchildren. [JOHN COOKSON] ■

Samuel Isaac Cohen, former professor of psychiatry Royal London Hospital (b South Wales 1925; q Cardiff 1948; MD, FRCP, FRCPsych), d 9 September 2004.

John Hunter Annan

Former consultant orthopaedic surgeon Huddersfield Royal Infirmary (b 1915; q Edinburgh 1938; FRCS Ed), d 24 January 2004.

Hunter Annan joined the Royal Army Medical Corps in 1940. He was taken prisoner of war, and later transferred to a PoW hospital, becoming medical officer to the British and American section. Although inexperienced he carried out many operations over the next two years. He was mentioned in dispatches three times. In 1954 he was appointed consultant orthopaedic surgeon at Huddersfield Royal Infirmary, retiring in 1980. His special interests were paediatric orthopaedics and leg equalisation. He leaves a wife, Muriel; three children; and seven grandchildren. [H MARSHALL WILLIAMS] ■

known locally for his amateur acting. He leaves a wife, Santwana, and a son. [S P MUKHERJEE, D K BANERJEE] ■

John Henry Rolland Ramsay



Consultant chest physician Sunderland 1966-87 (b Glasgow 1922; q Glasgow 1946; OBE, FRFPs, FRCP Glas), died from a heart attack on 21 July 2004.

Rolland Ramsay became a consultant chest physician in Sunderland in 1966, working in all of the city's hospitals over the next 21 years. Nursing his terminally ill sister at home and noticing the needs of his own lung cancer patients, he realised the need for NHS-provided palliative care. In 1978 he and a colleague began campaigning for an NHS hospice in Sunderland. Their vision was realised in 1984 with the founding of St Benedict's Hospice (one of the first hospices funded solely by the NHS), of which Rolland was the first medical director. Predeceased by his wife, Yvonne, he leaves two children and four grandchildren. [CRICHTON RAMSAY, WENDY SEED] ■

Ann Lindsay Stewart



Former consultant in perinatal medicine University College Hospital, London (b Cornwall 1930; q Bristol 1955; FRCP, FRCPCH, DCH), died from Pick's disease on 9 May 2004.

Ann trained in paediatrics in Bristol and Edinburgh before joining the neonatal research team at University College Hospital, London, in 1968. There she made her main interest the follow-up of high risk and premature infants, studying a large cohort into teenage and adult life, using modern scanning and psychometric techniques, latterly with the Institute of Psychiatry. In this pioneering study it became clear that the long term outcome of high risk infants could be reliably predicted from early observations and that advances in care could greatly improve survival without significant disability. She leaves a husband, Duncan Hutchison; two children; and two grandchildren. [SIMON ROTH, JOHN WYATT, OSMUND REYNOLDS, DUNCAN HUTCHISON] ■

Biswanath Bhattacharjee

Former general practitioner Littleborough, Rochdale, Lancashire (b Purnea, Bihar, India, 1933; q Calcutta 1961; DMRD), d 28 September 2004.

Bishu came to the United Kingdom in 1967 and worked in various hospitals in Wales. Having obtained a diploma in chest diseases from Cardiff in 1970 he moved to Rochdale and first worked as a paediatric registrar. He became a general practitioner in Littleborough, Lancashire, in 1974 and remained in the same practice as a senior partner until his retirement in 1998. Bishu was well